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Conservation Pledge

I give my
pledge as an American
to save and faithfully to
defend from waste the
natural resources of
my country—its soil
and minerals, its
forests, waters
and wildlife

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Louisiana has made great strides in its program of restocking areas where deer populations were low or nonexistent. In 1948 the trapping and transplanting of deer was a slow process, but today the Commission employs the use of airplanes, fast boats and even helicopters in its endeavor to furnish more game and sport for outdoorsmen in all parts of the State.

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REFUGE PROGRESS

Allan Ensminger

THE PAST TWENTY years have brought about some notable changes in the wildlife refuge system in Louisiana. Probably the most important is the recognition of the purpose and need of refuges in modern wildlife management. Twenty years ago Louisiana, along with many other states, was managing and maintaining areas through the state for the protection of upland game species. This is an archaic procedure and one which has no place in a practical game management program because of the simple fact that resident game species have a very limited home range. The old theory was that protected game would build up in a specific area and the surplus would spill over into surrounding areas. To a certain extent this is true; however, a much more practical approach to management is one of extensive law enforcement coupled with a good public educational program. This approach has replaced the need for upland game refuges in Louisiana and most of the old refuges have been converted into game management areas where an annual controlled harvest of surplus game is permitted by sportsmen.

The only refuges managed by the Wild Life and Fisheries Commission at the present time are migratory waterfowl refuges. These are the Rockefeller Wildlife Refuge located in Cameron and Vermilion Parishes; the State Wildlife Refuge in Vermilion Parish; the Marsh Island Wildlife Refuge located in St. Mary Parish; the St. Tammany Wildlife Refuge in St. Tammany Parish and the Coulee Wildlife Refuge in Morehouse Parish

These areas serve as wintering grounds for hundreds of thousands of waterfowl and play an important role in the State's wildlife management program. The importance of these areas



Boathouse and repair shop on Rockefeller Refuge twenty years ago.

has been intensified by the change in land use of most of the coastal marshes of Louisiana. This change in the marshes began with the discovery of oil and other minerals along the Louisiana coast. The exploration for these minerals created conditions which radically affected the general ecology of the coastal marshes and brought about changes which were undesirable for wildlife. The coastal refuges were not immune to this, and conditions were altered on these areas due to the mineral activities.

At first the new-found source of revenues which the minerals brought to the State seemed to be a windfall. It was soon obvious that, along with this new found fortune, there were many problems which would require expenditures of revenues never dreamed of before. This was necessary in order to protect the marshes and maintain the refuges in accordance with the terms and conditions of their donations.

The changes were primarily brought about with the introduction of salt water into marshes which were formerly fresh to slightly brackish. The canals excavated and the levee deposits from this work changed the drainage pattern of the watershed adjacent to these activities. As the plant communities began to change, there was a general deterioration of the coastal marshes as productive wintering grounds for the millions of migratory waterfowl which spend the winter along our coast line.

By the mid-1950's it was obvious that correc-



Present facilities at Rockefeller Wildlife Refuge headquarters include housing for technical personnel, laboratory, boathouses, equipment storage buildings and numerous research ponds and pens.

tive measures would have to be taken especially on the coastal refuges if Louisiana was to maintain its status as a primary wintering area on the gulf coast. An intensive development program was initiated on Rockefeller and Marsh Island Wildlife Refuges at this time. One 9,000 acre impoundment was constructed on Marsh Island and numerous impoundments, totalling approximately 19,000 acres, were constructed on the Rockefeller Wildlife Refuge. Prior to the construction of these impoundments, waterfowl inventories on the Rockefeller Wildlife Refuge indicated a wintering population of fifty to seventy-five thousand ducks. During 1967 inventories on this same area revealed a wintering population of 600,000 ducks with approximately 80% of these birds utilizing the impoundment areas.

Some of the impoundments were created through the utilization of levees deposited by oil companies. However, extensive expenditures were necessary to excavate material for new levees and to repair the existing ones. This work made it possible to regulate water conditions in the impoundments to a certain degree, and this manipulation has been used to create conditions desirable for the production of waterfowl food plants. Additional latitude has been added to management of some of the impoundments by the installation of concrete water-control structures of a stop-log type and in other impoundments by the installation of large double divergent pumping units.

The impoundments are not only attractive to wintering populations of waterfowl but are also heavily used by tremendous numbers of transient shore birds.

These areas are also quite beneficial to alligators as they provide stable water conditions which assures the alligators of good conditions for nesting and rearing of their young.

In recent years the development program on Marsh Island and State Wildlife Refuges have been primarily through the construction of low level weirs which stabilize water conditions during periods of low tides in the Gulf of Mexico. The crest of these structures is established at approximately six inches below marsh elevation and thus prevents the complete drainage of many shallow ponds and bayous. This condition encourages the growth of desirable aquatic plants as well as stabilizing water conditions in the general marsh area which also encourages the growth of good wildlife food plants. The general watershed pattern of these two areas lends itself to this type of development work quite well. This type of work is much more economical and desirable than the impoundment approach utilized extensively on Rockefeller Wildlife Refuge. Waterfowl inventories on Marsh Island and State Wildlife also reveal a tremendous increase in the usage of these two areas.

The St. Tammany Wildlife Refuge has served as a small resting area for waterfowl along the north shore of Lake Pontchartrain. This area is quite small and limited in its usefulness; however, it does serve a useful purpose in that it provides a place into which waterfowl can retreat to escape gunning pressure being applied by sportsmen hunting in the adjacent marshes.

The Coulee Wildlife Refuge was established through the efforts of local sportsmen to provide a resting area for wintering waterfowl utilizing the large Wham Brake section near Monroe. Approximately 30,000 ducks have utilized this area since its establishment. The area is made available to the Louisiana Wild Life and Fisheries Commission free of cost by the private landowners and plays a very important role in waterfowl hunting in the general Monroe area.

The past twenty years has brought about the development of new facilities on the refuges in order to house personnel and to provide workshop and storage facilities for the tremendous amount of equipment and supplies required to properly manage and maintain the refuges.



Present research facilities at Rockefeller Refuge provide all necessary conditions for studying various wildlife species.



Rigid protection has encouraged a large build-up of alligators on Refuge areas.

The revenue received from minerals on these areas have not only been used for the development and maintenance of the individual area but has served as a source of funds from which over 100,000 acres of property have been purchased for game management areas. These areas will serve future generations of sportsmen with a place to hunt and fish and enjoy the outdoors. In addition to this, funds have been utilized from the Rockefeller Refuge to establish a statewide conservation educational program which has served to acquaint thousands of students as well as adults with the overall wildlife management programs being conducted by the Commission.

Research activities which are conducted on the wildlife refuges serve as guide lines for private landowners in the management of their property. Perhaps the most important of these research activities has been the broad general study made by research personnel of the many factors involved in the general ecology of the Louisiana marshlands. Information gained in these studies has provided data for practical and economically feasible methods by which marshlands can be managed to produce annual crops of plants which are desirable for use by wildlife.

Another extremely important research program being conducted deals with the general life history and management of alligators. This valuable marsh animal was on the verge of becoming extinct during the early 1960's. Efforts made by

the Commission to protect the animal have resulted in a good recovery in the marshes of Southwest Louisiana. Several thousand animals have been moved from the refuge areas and distributed into the surrounding marshes in an effort to re-establish a breeding population in desirable marshes.

Research work is being conducted at Rockefeller Refuge to determine the feasibility of producing various types of commercially important fish in control ponds in the marsh. This work will be extremely valuable to marshland owners and should contribute substantially to the economy of the state.

Development and maintenance work on the refuges is a continuing process and one which will require considerable funds in order to maintain these areas for wildlife.

Future plans include the establishment of additional water control areas as well as more intensive control over existing facilities. The control of fur bearing animals will continue to play an important role in the refuge program in order to hold these animals in balance with their habitat.

Research activities will be continued and expanded in order to utilize the areas to their fullest extent and to provide information for private landowners in the management and protection of their marshes as wildlife areas.



Twenty years ago the Nutria was one of the Commission's boats. It is no longer in service and today's patrol boats and fleet of inboards and outboards are modern, fast and dependable. Maintenance is handled by the wharf's crew in New Orleans. Facilities at the wharf are available for major repairs of large vessels to repairing outboard motors. The main radio service department is also located at the New Orleans wharf.